

REMARKS

In the Office Action, the Examiner objected to the drawings, and rejected claims 1-25 under 35 U.S.C. § 102(b). Claims 1, 22, 24 and 25 have been amended to further clarify the subject matter regarded as the invention. Additionally, to expedite prosecution of this application, claims 2 and 23 have been cancelled from the application without prejudice or disclaimer. Hence, the rejection of these cancelled claims is rendered moot, as such, Applicants do not acquiesce, admit or otherwise agree with the Examiner's rejection of these claims in view of the cited references.

Reconsideration of the application is respectfully requested based on the following remarks.

OBJECTION TO THE DRAWINGS

In the Office Action, the Examiner objected to the drawings under 37 CFR 1.84(p)(4). In particular, the Examiner objected to the use of "504" to designate items in both FIG. 5 and FIG. 6A. Submitted together here with is a replacement FIG. 6A in which the previously used reference "504" has been replaced by the reference "604," thereby overcoming the Examiner's rejection. Accordingly, it is respectfully requested that this replacement drawing be entered and that the objection to the drawings be withdrawn.

REJECTION OF CLAIMS 1-25 UNDER 35 USC §102

In the Office Action, the Examiner rejected claims 1-25 under 35 USC §102(b) as being anticipated by Hughes et al. (U.S. Patent 6,747,971). This rejection is fully traversed below.

Hughes et al. describes a crosspoint switch having a plurality of switch planes between ingress ports and egress ports. Each of the ingress ports have at least one ingress queue and a multicast queue. Incoming multicast traffic is queued in the multicast queue, and incoming unicast traffic is queued in the unicast queue. As shown in FIG. 3, every switch plane scheduler 316a-h receives a switch frame 315a-h from every ingress port 304a-h. Nevertheless, "each switch plane 309a-h may transport one cell to each egress ports 306 per clock tick." Hughes et al., col. 8, lines 10-12. Hence, although a multicast switch frame maps the service request for multiple destination egress ports of a single incoming cell queued in the multicast queue, only a single egress port receives the queued cell at a time. This approach is sometimes referred to as a round robin approach. See Hughes et al., col. 12, lines 15-28. FIG. 9A also illustrates a switch

Amendments to the Drawings:

The attached drawing sheet includes changes to Fig. 6A. This sheet, which includes Fig. 6A, replaces the original sheet including Fig. 6A

Attachment: Replacement Sheet

plane selection process in which only a single output control port is used at a time. See Hughes et al., col. 17, lines 12-29.

In contrast, the present invention pertains to a switching apparatus that is more efficient than Hughes et al. with respect to switching of multicast requests. More particularly, claim 1 pertains to a switching apparatus then includes at least one multicast source queue, at least one switch that includes a scheduler, and a plurality of destination of queues. With respect to switching of multicast payloads through the switching apparatus, claim 1 specifically recites "said at least one switch simultaneously delivers the associated multicast payload to a plurality of said destination queues" (claim 1, lines 14-15). As a result, a multicast payload is efficiently passed through the switch such that it is simultaneously delivered to a plurality of destination queues. Recall, as discussed above, Hughes et al. provides serial delivery and thus does not provide simultaneous delivery of cells to multiple output control ports or egress ports. Therefore, it is submitted that claim 1 is patentably distinct from Hughes et al.

Similarly, claims 13 and 22 pertain to a method for multicasting data held in a sending virtual queue through a switching apparatus to receiving virtual queues. Among other things, claims 13 and 22 recite "concurrently transmitting the common payload data from the switching apparatus to each of the certain plurality of the receiving virtual queues." Hence, for similar reasons, it is submitted that claim 13 and 22 are patentably distinct from Hughes et al.

Based on the foregoing, it is submitted that claims 1, 13 and 22 are patentably distinct from Hughes et al. In addition, it is submitted that dependent claims 3-12, 14-21, 24 and 25 are also patentably distinct for at least the same reasons. The additional limitations recited in the independent claims or the dependent claims are not further discussed as the above-discussed limitations are clearly sufficient to distinguish the claimed invention from Hughes et al. Thus, it is respectfully requested that the Examiner withdraw the rejection of claims 1, 3-22, 24 and 25 under 35 USC §102(b).

SUMMARY

It is submitted that claims 1, 3-22, 24 and 25 are patentably distinct from the cited references. Reconsideration of the application and an early Notice of Allowance are earnestly solicited.

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 50-0388 (Order No. PETAP003).

Respectfully submitted,

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